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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/951,652 10/16/97 MURAD

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EXAMINER

VARIAN ASSOCIATES
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CHURCH, C

ART UNIT

PAPER NUMBER

2876

DATE MAILED:

08/05/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)	
Examiner	Group Art Unit	

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

Responsive to communication(s) filed on 5/27/99

This action is FINAL.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

Claim(s) 1-5, 7-15 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1-5, 7-15 is/are rejected.

Claim(s) _____ is/are objected to.

Claim(s) _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The proposed drawing correction, filed on _____ is approved disapproved.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Attachment(s)

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____ Interview Summary, PTO-413

Notice of Reference(s) Cited, PTO-892 Notice of Informal Patent Application, PTO-152

Notice of Draftsperson's Patent Drawing Review, PTO-948 Other _____

Office Action Summary

The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the data collection means must be shown or the feature cancelled from the claim. No new matter should be entered.

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to support the invention as it is now claimed. While lines 24-28 of page 5 explain:

If this scanning operation according to the program is carried out at a sufficiently high frequency, the user's eyes will see a stationary image, rather than an image of a moving point, on the patient's body.

this does not teach that the laser beam is directed at a high frequency as claimed.

Claims 1-5, 7-10 and 12-15 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification.

Claims 1-5, 7-10 and 12-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limiting meaning of "high frequency" is undefined. Claim 14 misdescribes the disclosed

invention in that although data collection means may generate digital data, the x-ray beam, itself, is not digital as claimed.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5 and 8-15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Trotel. Trotel teaches a diagnostic/therapy machine comprising an x-ray source 36, x-ray detector (lines 1-6 of column 5), x-ray transparent mirror 48, laser 40, rotatable mirrors 42 and 43, motors 46 and 47 and control means 32. See lines 7 et seq of column 5.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same

person.

Claims 2 and 7 are rejected under 35 U.S.C. § 103 as being unpatentable over Trotel. Trotel fails to mention the color of the laser light, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ any color that is readily visible such as green.

Applicant's arguments filed May 27, 1999 have been fully considered but they are not deemed to be persuasive. It is noted that method claim 5 has been amended to include the step of "exposing said target region to an x-ray beam for medical treatment" presumably to overcome the § 112 rejection of the previous office action.

Lines 51-57 of column 5 of Trotel describe the operation of the scanning light beam

The scanning device 37 can be used to make the light beam 41 describe the external surface of the x-ray or high energy beam, depending on the signals applied to the deflectors 46 and 47. The trace of the beam 53 on the patient's skin then represents the boundaries of the trace of the x-ray or high energy beam when it enters the patient.

Such boundary is a line and not a set of spots as argued by applicant. For the light beam trace to be a set of discrete spots, the light beam 41 would have to be pulsed on and off, but no pulse means are taught by Trotel. The "points" in column 8 (the claims) cited by applicant refer to the "points of impact" (merely a figure of speech) of the high energy beam (column 3), which in fact, are not points at all but an area.

Contrary to applicant's assertion that Trotel does not employ

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low energy x-rays to determine the target region within the patients body, lines 1-6 of column 5 of Trotel teach that the system illustrated in figure 4 performs both simulation (target detection) and therapy and includes an x-ray receiver that is not shown.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication should be directed to Examiner Church at telephone number (703) 308-4861.

Craig E Church

CRAIG E. CHURCH
Senior Examiner
ART UNIT 2876